

Customer No.: 31561
Application No.: 10/605,034
Docket No.: 10231-US-PA

REMARKS

Present Status of Application

The Office Action dated March 6, 2006, rejected claims 3 and 11 under 35 U.S.C. 112, second paragraph, as being indefinite. Claims 1, 3-9, and 11-19 were rejected under 35 U.S.C. 103(a) as being unpatentable over Sugahara (US Patent No. 6,037,646) in view of Pierson (US Patent No. 6,569,710).

Claims 1, 9 and 14 have been amended for providing more descriptions, while claims 3, 11 and 16 have been cancelled. No new matter has been added to the application by the amendments made to the specification, claims and drawings. This Amendment is promptly filed to place the above-captioned case in condition for allowance. After entering the amendments and considering the following discussions, a notice of allowance is respectfully solicited.

Discussions for 112 rejections

Claims 3 and 11 were rejected under 35 U.S.C. 112, second paragraph, as being indefinite.

Claims 3 and 11 have been cancelled.

Withdrawal of this rejection is respectfully requested.

Discussion for 103 rejections

Claims 1, 3-9, and 11-19 were rejected under 35 U.S.C. 103(a) as being unpatentable over Sugahara (US Patent No. 6,037,646) in view of Pierson (US Patent No.

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6,569,710).

Claims 1, 9 and 14 have been amended to provide more descriptions and define more clearly according to this invention. Claims 3, 11 and 16 have been cancelled. Supporting grounds for these amendments can be found at least in the second paragraph of page 6 and figure 3 and 3A in the specification as well as figures 7 and 8. It is believed that no new matter has been added by the amendments made to the claims.

Applicants submit that independent claims 1, 9 and 14 patently define over the prior references for at least the reason that the cited art fails to disclose each and every feature as claimed in the present invention.

Claim 1 teaches, among other things, *"...disposing a stiffener on the matrix substrate,..... wherein the stiffener has a top portion, sidewalls and a flange portion, and has a plurality of openings on the top portion..."* while claims 9 and 14 recites at least *"...a stiffener, disposed above and unattached to the (thin) substrate..."*.

However, Sugahara does not teach or disclose the above-mentioned claimed features. Instead, Sugahara teaches a BGA package 11, wherein the cover member 11k is laminated directly to the surface of the board 11a, and the chip 10 is mounted on the surface of the board 11a. As taught by Sugshara, "the cover member 11k does not allow the molten resin to penetrate into the gaps between the via-hole plugs 11d and the insulating board 11a" (col. 5, lines 3-10), the cover member 11k is a flat plate (as shown in figures 2-3) tightly adhered to the flat board 11a for stopping the overflow resin. Clearly, the cover member 11k is configured differently and can not be considered comparable to the stiffener of this invention.

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As a result, Sugahara fails to teach or disclose all the limitations as recited in amended claims 1, 9 and 14.

The Office Action further relied on Pierson for teaching more than one chips and dicing the substrate.

Applicants respectfully disagree and would like to point out that even though the Office Action relied upon Pierson for teaching the above-mentioned features, Pierson still fails to cure the specific deficiencies of Sugahara.

Pierson merely discloses laminating a stiffener panel 21 to the base plate 22 and then attaching a claming plate 33 to the laminated structure. From figures 8 and 12 and the related descriptions (col. 5, lines 38-40), the stiffener plate 21 obviously is a flat plate having the same dimensions as the base plate 22 and adhered to the base plate 22. Therefore, even considering Pierson discloses more than one chips and the dicing step, the combination of Pierson and Sugahara fails to teach or suggest each and every feature recited in amended independent claims of this application.

Accordingly, it is respectfully submitted that dependent claims 4-8, 12-13, 15 and 18-19 patentably distinguish over the cited references, either alone or in combination, for at least the reasons stated above as well as for the additional features that these claims recite.

Reconsideration and withdrawal of these rejections under 35 USC 103(a) are respectfully requested.

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CONCLUSION

In view of the foregoing, it is believed that all pending claims are in proper condition for allowance. If the Examiner believes that a telephone conference would expedite the examination of the above-identified patent application, the Examiner is invited to call the undersigned.

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Respectfully submitted,


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